

which is often the means of saving her from infection. Remove from the life and puerperium of even our high-bred women the elements of septic and specific infection, and even with their distorted uteri, the conditions I have spoken of, as well as more serious ills, will not so often be found associated with the inevitable cervical tear. But when found, pray let us have the proper conception of their causes and significance, and apply to each its indicated procedure.

Emmet's teachings have been so misapplied that now a condition which is natural to the mother is considered pathological, and is subjected to operation. When the cervix uteri is so far advanced in disease as to require an operation, I do not believe trachelorrhaphy the preferable procedure. When the laceration is of such degree that a cosmetically perfect cervix can be secured by trachelorrhaphy, I do not consider any operation necessary. Erosion after labor requires the same treatment as in the virgin.

Hypertrophy in the parous woman needs the operation applicable to hypertrophy in the nulliparous. And those other conditions of the cervix which follow labor, whether associated with a slight or a severe laceration, necessitate the removal of more tissue than trachelorrhaphy secures. The great objections I have to trachelorrhaphy are, that it does not give a cervical canal of dimensions equal to the requirements of a woman, who should, as she gets older, bear each successive child with greater ease and security than the preceding; it does not remove sufficient tissue where operation is indicated; and it does not appeal to me as a rational procedure, believing, as I do, that most of the cases subjected to it, require no operation whatever on the cervix, inasmuch as a generous laceration is normal and necessary.

The marvel is that, seeing all mothers have torn cervices, we have not before sought the reason. The indications for performing the operation constitute the measure of its limitations, and from them may be deduced its abuse.

HYSTERECTOMY IN BILATERAL DISEASE OF THE APPENDAGES.¹

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THE Hegar-Batthey operation of years ago gave us results which, in view of our utter ignorance of all that related to disease of the appendages, seemed startling and most gratifying. But this operation, though legitimately applied by surgeons, yet, because of its first furor, created in the minds of the less skilled an entire misinterpretation of its limita-

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tion, and was subjected to the grossest possible abuse. To such an extent was this carried that the operation was brought into entire disrepute. From this extreme point of abuse we have come back to a just estimate of the value of the operation, and are able fully to measure all that it accomplishes and all in which it fails. And, whereas the original operation is rarely performed upon the indications first laid down for it, yet, at least, it has pointed out to us the way for a proper adaptation of practically the same procedure under more precise and more limited indications. Until we had this operation the teachings of Bernutz were lost; but fully appreciating the operation, and, still more, the failures of its first application, the more accurate pathology of Bernutz showed us the true scope of the Hegar-Batley operation. Thus it is, while discarding this operation absolutely, we must yet accord it the credit due, as a step in the proper treatment of the diseases under consideration. And although this new application of the Hegar-Batley operation to the treatment of purulent diseases of the adnexa seemed to us to be about all that we could expect, yet in the light of the surgery of to-day, and a more precise analysis of the results of this further differentiation of the original operation, we are brought to the decision of considering it wholly unsatisfactory. Primarily, it seemed to be health- as well as life-giving, but although the patients were cured of the grosser and more acute lesions and symptoms, yet, to-day, we find that the ultimate results have not consummated our hopeful expectations. And although we are not content with these ultimate results, yet must we consider them glorious compared with the treatment of neglect, based upon the cellulitis theory of the cause of these lesions. Life has been saved, to be sure, but not so often has health been restored as we expected, and as might be desired. The cause of this failure to symptomatically cure these patients lies in an extension of the inflammatory conditions beyond the grosser lesions made manifest by our celiotomy. Did the removal of these gross but secondary lesions cut short the symptoms, or did we not by their removal leave the essential and primary cause of all the trouble, together with the less apparent, but more fruitful source of suffering, the inflamed uterus, and its nerve centres? I unhesitatingly answer, Yes.

We are now in a position to justly, as well as accurately, estimate the benefits derived from the old operation of removal of bilateral purulent disease of the appendages; and we are also able to say in how far that operation has failed. Careful observation, devoted to cases through some time, demonstrates that while pathologically they are cured, but few are symptomatically relieved. The cause of the failure to accomplish all that might be desired, so far as the subject of the operation is concerned, lies in our failure to remove the original and persisting source of infection. The question has simply resolved itself

into this: that either the cases operated on by those who claim that the uterus, when left, is not a cause of further symptoms and may be rendered innocuous by mild treatment, are not thus cured, or else gentlemen making these statements have submitted to their skill the most simple cases, as a rule, and in the severe ones have failed to observe the results of their work. The cause of continuance of distressing symptoms is the primary lesion in the diseased uterus; the effect of the premature and artificial menopause upon the sympathetics; the irregular and delayed involution of the uterus; the adhesions formed between the intestines and raw surfaces in the pelvis; the possibility of repeated reinfections of the uterus; the possibility of ventral hernia, owing to the different methods of drainage; and many other lesser lesions, together with malpositions natural to the uterus repeatedly inflamed and deprived of its natural supports. Broadly stated, a continuance of the symptoms is due to a retention of the inflamed uterus, which is the primary seat and original cause of every lesion found in these cases, and the effects of its continued influence upon the pelvis, lymphatics, and nerves.

Observations of the results of my own operations and those obtained by the old method, made me eager to grasp any possibility of obtaining better, more speedy, and more permanent relief for these women from the one great subjective symptom, *pain*.

In 1890, having removed many cancerous uteri *per vaginam* with absolutely uncomplicated recoveries, a case presented with bilateral suppurative disease of the adnexa and a large retroflexed uterus. Curettage, salpingo-oophorectomy, and hysterorrhaphy were contemplated; but the excellent results obtained from removal of the uterus and adnexa in cancerous cases suggested to me that, inasmuch as the woman had to be castrated, why should I not remove the diseased uterus also. This I did. The remote, as well as the immediate result, was perfect. The severe criticism following the report of this case, and the timidity incident to my conscious fallibility, forced me to resume the old routine and generally practised operation. But this one case had left upon my mind an impression and a brilliant picture. During this period of my relapse from the proper procedure in these simple suppurative cases, I removed many fibroids having purulent adnexa. The contrast was unavoidable between the results obtained by ablation of the fibroid uterus with bilateral suppurative tubal disease, and those which followed removal of these tubes and retention of the inflamed uterus. In both classes the uteri were diseased; and the belief came to me that the difference in immediate as well as remote results was due, *must be due*, to the retained uterus in the latter class.

In September, 1892, I again removed a uterus, associated with bilateral suppurative tubo-ovarian disease, selecting the abdominal route rather than the vaginal, for reasons to be presently stated. At this time I was

yet undecided as to a routine practice in these cases; and while adopting the old method in some, and the more radical in others, I was enabled to compare the result in the two classes. And this contrast was made more marked by the fact that cases presented themselves to me on whom I had previously removed bilateral suppurating adnexa, with a persistence of most distressing symptoms, and who were entirely relieved of all symptoms when I, by a secondary operation, removed the uterus.

Such a study substantiated me in the belief, and confirmed me in the method I now employ, of, in every case demanding the sacrifice of both adnexa, removing the uterus also. The following reasons appeal to me why the uterus should be removed in these cases:

The uterus without the adnexa is a useless organ, and devoid of physiological function.

It is not innocuous; it is, on the contrary, positively a diseased and therefore harmful organ.

Histologically, the tubes are but parts of the uterus, and their removal is partial amputation of the uterus; therefore, why should we not go a step further and remove the rest of the diseased organ?

Is it conceivable—clinically, is it a fact—that those projections of uterine tissue which we call the tubes are *alone* diseased, and not the rest of the uterus?

This question is pertinent and forceful when it is known that the primary seat of the disease is the uterine cavity, and that the tubes are involved by direct continuity of tissue. Although in the last few years the indications for drainage have, under a more perfect technique, become limited to a very small class of cases, still there are those which demand drainage in a *surgical* sense. What route for this drainage more proper than the one Nature has provided for the lochia and other physiological discharges?

Leaving the uterus merely invites future infection; and it may be, I think, fairly stated that a woman who has contracted gonorrhoea from husband or lover will again be subjected to the same exposure after her tubes are removed. And although we may, for argument, grant all that those who practise the old operation claim for it, yet, surely, these will assent that removal of the uterus relieves the woman from the possibility of further contamination of this organ. Careful observation and questioning of my patients has elicited the fact that the artificial menopause is much easier for the woman who has had her uterus removed, whether for cancer, for fibroid, or when associated with disease of the adnexa, than when the tubes alone are removed. The explanation of this lies in the fact that when we remove the uterus we remove the great mass of ganglionic tissue in the organ.

Did this operation involve an increased danger to the woman some objection might be made to it; but it does not. On the contrary, it

lessens the mortality in the hands of those familiar with the technique of hysterectomy. In its performance it takes no longer than the admittedly proper procedure of curettage preceding a celiotomy, and some less time than to attach a proper drain where drainage is demanded, or to do a hysterorrhaphy. And when we consider the possible necessity for a secondary celiotomy to remove a uterus for persistence of symptoms, or to close a hernia following drainage, the argument for the complete piece of work in the first instance becomes still more powerful. My objection to the vaginal route in hysterectomy is, that when once begun it must be completed, and the operation does not admit of a clearer estimate of the disease of one or the other adnexa, and possibly some conservative procedure.

Were I addressing a society of those not skilled in abdominal surgery I might not dare to advocate for their adoption this complete operation, but would advise some palliative procedure. But my apparent boldness is born, not of a disregard for what the operation embodies, but belief in a just and proper estimate of the incompleteness of the old method and the completeness of this. That I may not be misunderstood, in closing I will emphasize the fact that I am dealing only and solely with those lesions of the adnexa which unquestionably demand the removal of the adnexa where both are the seat of disease precluding the possibility of cure by all conservative methods.

AMPUTATION OF THE ENTIRE UPPER EXTREMITY (INCLUDING THE SCAPULA AND CLAVICLE) AND OF THE ARM AT THE SHOULDER-JOINT.¹

WITH ESPECIAL REFERENCE TO METHODS OF CONTROLLING HEMORRHAGE. WITH A REPORT OF ONE CASE OF THE FORMER
AMPUTATION AND FOUR OF THE LATTER.

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In this paper I shall consider, first, amputations which allow of simple disarticulation at the shoulder-joint itself; secondly, those cases in which the axilla is invaded, yet to such an extent as to allow of its being thoroughly cleaned out, followed by amputation at the shoulder; and, thirdly, those cases in which the parts are so far invaded as to necessitate the removal of the entire upper limb anatomically, that is to say, including the removal of clavicle and scapula.

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